AMENDMENTS TO THE CLAIMS

This Listing of the Claims will replace all prior versions, and listings, of claims in this application.

Listing of the Claims:

1. (Currently Amended) A communications device for detecting user transmitted symbols encoded in spread spectrum waveforms (hereinafter "user waveforms") comprising

a first process operating under a first operating system and executing a first set of communication tasks for detecting user transmitted symbols encoded in the user waveforms,

a second process operating under a second operating system, and executing a second set of communication tasks for detecting user transmitted symbols encoded in the user waveforms, where the first and second operating operation systems differ,

a protocol translator coupled to the first and second processes and translating communications in between,

the first process sending to the second process via the protocol translator a set of executable instructions for performing at least a portion of said second set of communication tasks,

wherein the second process generates a matrix as a result of executing the set of instructions.

2. (Canceled)

3. (Currently Amended) The device of claim 12, wherein the matrix represents any of a correlation of code sequences for the user waveforms, a cross-correlation of the user waveforms based on time-lags and complex amplitudes, and estimates of user transmitted symbols embedded in the user waveforms.

4. (Original) The device of claim 3, wherein the second process routes said matrix to one or more memories and devices based on a configuration specified by the first process.

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5.   (Currently Amended) The device of claim 1, wherein the first process sends via the protocol translator information to the second process ~~processor~~ for configuration thereof.

6.   (Original) The device of claim 5, wherein the information comprises a routing map.

7.   (Original) The device of claim 6, wherein the second process routes a result of executing the set of instructions based on the routing map.

8.   (Currently Amended) The device of claim 7, wherein the second process generates the ~~a~~ matrix as the result of executing the set of instructions.

9.   (Original) The device of claim 8, wherein the matrix represents any of a correlation of code sequences for the user waveforms, a cross-correlation of the user waveforms based on time-lags and complex amplitudes, and estimates of user transmitted symbols embedded in the user waveforms.

10.   (Currently Amended) A communications device for detecting user transmitted symbols encoded in spread spectrum waveforms (~~hereinafter~~ "user waveforms") comprising

a first process operating under a first operating system and executing a first set of communication tasks for detecting user transmitted symbols encoded in the user waveforms,

a plurality of second processes each operating under a second operating system and executing a respective second set of communication tasks for detecting user transmitted symbols encoded in the user waveforms, where the first and second operating ~~operation~~ systems differ,

a protocol translator coupled to the first and second processes and translating communications in between,

the first process sending to each second process via the protocol translator a set of

executable instructions for performing a respective portion of a common task

wherein the first process sends to each of the second processes via the protocol translator

instructions for generating a respective portion of a matrix.

11.   (Canceled)

12.   (Currently Amended) The device of claim 10~~11~~, wherein the first process sends to each of

the second processes via the protocol translator instructions for generation of the portion of a

matrix representing ~~of~~ any of a correlation of code sequences for the user waveforms, a

portion of a cross-correlation of the user waveforms based on time-lags and complex

amplitudes, and estimates of user transmitted symbols embedded in the user waveforms.

13.   (Currently Amended) The device of claim 10~~11~~, wherein the first process sends via the

protocol translator to each second process information for configuration thereof.

14.   (Original) The device of claim 13, wherein the each of the second processes routes its

respective portion of a matrix to one or more memories and devices based on the

information from the first process.

15.   (Currently Amended) The device of claim 13, wherein the first process monitors an

operational status of each of the second processes and generates the information for

configuration thereof based thereon ~~theron~~.

16.   (Currently Amended) The device of claim 13, wherein the first process monitors an

operational status of each of the second processes and generates the set of executable

instructions thereof based thereon ~~theron~~.

17.   (Currently Amended) A communications device for detecting user transmitted symbols

encoded in code spread spectrum waveforms (~~hereinafter~~ "user waveforms") comprising

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a first process operating under a first operating system and executing a first set of communication tasks for detecting user transmitted symbols encoded in the user waveforms,

a second process operating under a second operating system, and executing a second set of communication tasks for detecting user transmitted symbols encoded in the user waveforms, where the first and second operating ~~operation~~ systems differ,

a protocol translator coupled to the first and second processes and translating communications in between,

the first process sending instructions to the protocol translator for determining how it translates ~~tranlates~~ communication between the first and second processes.

18. (Currently Amended) The device of claim 17, wherein the first process sends to ~~each of~~ the second process ~~processes~~ via the protocol translator instructions for generating a respective portion of a matrix.

19. (Currently Amended) The device of claim 18, wherein the first process sends to ~~each of~~ the second process ~~processes~~ via the protocol translator instructions for generation of the portion of a matrix representing ~~of~~ any of a correlation of code sequences for the user waveforms, a portion of a cross-correlation of the user waveforms based on time-lags and complex amplitudes, and estimates of user transmitted symbols embedded in the user waveforms.